

I Claim:

5       1. A method of labeling a glass, plastic or metal container or surface by means of a water based adhesive composition, said method comprising:

10      (a) selecting a polymeric label having a density of less than 0.9; .  
          (b) applying a water based adhesive to said polymeric label to form a fastenable polymeric label;  
          (c) fastening said fastenable polymeric label to a glass, plastic or metal container or surface; and  
          (d) allowing said polymeric label to dry on said glass, plastic or metal surface or container.

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20      2. A method for labeling a glass, plastic or metal container as defined in claim 1 wherein a hydrophilic layer is applied to said low density polymeric film before said water based adhesive is applied.

25      3. A method for labeling a glass, plastic or metal container as defined in claim 2 wherein water is applied to said hydrophilic layer to form a fastenable polymeric label.

30      4. A method for labeling a glass, plastic or metal container as defined in claim 2 wherein a waterbased adhesive containing a catalyst is applied to said hydrophilic layer to form a fastenable polymeric label.

35      5. A method for labeling a glass, plastic or metal container as defined in claim 2 wherein the reactive catalyst is crosslinkable with either the hydrophilic layer the adhesive layer or both layers.

6. A method for labeling a glass, plastic or metal

container as defined in claim 2 wherein the hydrophilic layer is a coated, coextruded or extruded layer.

5 7. A method for labeling glass, plastic or metal container as defined in claim 6 where hydrophilic layer is a coated layer.

10 8. A method for labeling a glass, plastic or metal container as defined in claim 2 wherein the adhesive is applied with 100% coverage or a pattern to the hydrophilic layer.

15 9. A method for labeling a glass, plastic or metal container as defined in claim 2 wherein less adhesive is applied than is normally applied to a paper label.

20 10. A method for labeling a glass, plastic or metal container as defined in claim 2 wherein the polymeric label is a mono-layer or coextruded film selected from white or colored polypropylene, polyethylene, polyester, polystyrene, polycarbonate or compatibilized polymer blends.

25 11. A method for labeling a glass, plastic or metal container as defined in claim 2 wherein the polymeric label includes a reverse printed clear polymeric film which is laminated to the low density polymeric label surface.

30 12. A method for labeling a glass, plastic or metal container as defined in claim 2 wherein an adhesion promoting tie layer or primer is used to promote adhesion of the hydrophilic layer to the polymer label.

35 14. A method for labeling a glass, plastic or metal container as defined in claim 2 wherein an adhesion promoting layer is used on the print surface on the

polymer label to promote indicia adhesion.

15. A method for labeling a glass, plastic or metal container as defined in claim 2 wherein a protective coating over the surface of the printed indicia is formulated with slip aids and/or anti-static agents to control the coefficient of friction and static properties between the hydrophilic layer and protective coating for optimum high speed application.

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16. A method for labeling a glass, plastic or metal container as defined in claim 2 wherein a protective coating over the surface of the printed indicia is formulated with anti-block and/or anti-stick aids to control the blocking tendency of the moisture activated hydrophilic layer for optimum high speed application.

17. A method for labeling a glass, plastic or metal container as defined in claim 2 wherein a protective coating over the surface of the exposed polymer layer is formulated with slip aids and/or anti-static agents known to those in the art to control the coefficient of friction and static properties between the hydrophilic layer and protective coating for optimum high speed application.

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18. A method for labeling a glass, plastic or metal container as defined in claim 2 wherein a protective coating over the surface of the exposed polymer layer is formulated with anti-block and/or anti-stick aids to control the blocking tendency of the moisture activated hydrophilic layer for optimum high speed application.

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19. A method for labeling a glass, plastic or metal container as defined in claim 2 wherein the hydrophilic layer is formulated with humectants for curl control and/or anti-block aids to control the layflat and

blocking properties of the label for optimum high speed application.

5        20. A method for labeling a glass, plastic or metal container as defined in claim 2 wherein the aqueous label adhesive is based on starch, casein, synthetic polymer or blends of starch, casein or synthetic polymers.

10      21. A method for labeling a glass, plastic or metal container as defined in claim 2 wherein the hydrophilic layer activated by water into an adhesive layer is a derivative of polyacrylic acid or polyacrylic acid copolymer.

15      22. A method for labeling a glass, plastic or metal container as defined in claim 21 wherein the hydrophilic layer activated by water into an adhesive layer is a carboxylated sodium polyacrylate.

20      23. A method of labeling a glass, plastic or metal container or surface by means of a water based adhesive composition, said method comprising:

25      (a) selecting a polypropylene label having a density of 0.55 - 0.85;  
          (b) applying a water based adhesive to said polypropylene label to form a fastenable label;  
          (c) fastening said fastenable label to a glass or plastic container or surface; and  
30      (d) curing said polypropylene label on said glass or plastic container or surface.

35      24. A plastic metal or glass container having a polymer label comprising a low density polymer, a dried water based adhesive which affixes said polymer label to said container, said polymer label containing a portion of said dried water based adhesive within said polymer.